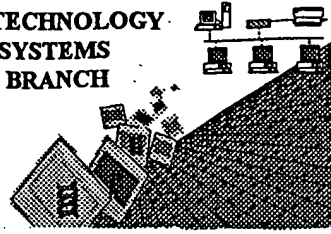


N. Yin

Re-run

BIOTECHNOLOGY  
SYSTEMS  
BRANCH



## RAW SEQUENCE LISTING ERROR REPORT

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) detected errors when processing the following computer readable form:

Application Serial Number: 09/988,384A  
Source: ORF  
Date Processed by STIC: 3/19/2002

THE ATTACHED PRINTOUT EXPLAINS DETECTED ERRORS.

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FOR CRF SUBMISSION QUESTIONS, PLEASE CONTACT MARK SPENCER, 703-308-4212.

FOR SEQUENCE RULES INTERPRETATION, PLEASE CONTACT ROBERT WAX, 703-308-4216.

PATENTIN 2.1 e-mail help: [patin21help@uspto.gov](mailto:patin21help@uspto.gov) or phone 703-306-4119 (R. Wax)

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<http://www.uspto.gov/web/offices/pac/checker>

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U.S. Patent and Trademark Office, Technology Center 1600, Reception Area, 7<sup>th</sup> Floor, Examiner Name, Sequence Information, Crystal Mall One, 1911 South Clark Street, Arlington, VA 22202  
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Revised 01/29/2002



OIPE

## RAW SEQUENCE LISTING

DATE: 03/19/2002

PATENT APPLICATION: US/09/988,384A

TIME: 13:55:49

Input Set : A:\09-988384 Sequence Listing.txt

Output Set: N:\CRF3\03192002\I988384A.raw

Does Not Comply  
Corrected Diskette Needed

4 <110> APPLICANT: Sherman, D.H.  
5 Liu, H.  
6 Xue, Y.  
7 Zhao, L.  
9 <120> TITLE OF INVENTION: DNA encoding methymycin and pikromycin  
11 <130> FILE REFERENCE: 600.536US1  
13 <140> CURRENT APPLICATION NUMBER: US 09/988,384A  
14 <141> CURRENT FILING DATE: 2001-11-19  
16 <150> PRIOR APPLICATION NUMBER: PCT/US99/14398  
17 <151> PRIOR FILING DATE: 1999-06-25  
19 <150> PRIOR APPLICATION NUMBER: US 09/105,537  
20 <151> PRIOR FILING DATE: 1998-06-26  
22 <160> NUMBER OF SEQ ID NOS: 53

## ERRORED SEQUENCES

2297 <210> SEQ ID NO: 6  
2298 <211> LENGTH: 12199  
2299 <212> TYPE: PRT  
2300 <213> ORGANISM: Streptomyces venezuelae *see pg 2-7*  
2302 <400> SEQUENCE: 6  
2303 Met Ala Phe Ser Pro Gln Gly Gly Arg His Glu Leu Gly Gln Asn Phe  
2304 1 5 10 15  
2305 Leu Val Asp Arg Ser Val Ile Asp Glu Ile Asp Gly Leu Val Ala Arg  
2306 20 25 30  
2307 Thr Lys Gly Pro Ile Leu Glu Ile Gly Pro Gly Asp Gly Ala Leu Thr  
2308 35 40 45  
2309 Leu Pro Leu Ser Arg His Gly Arg Pro Ile Thr Ala Val Glu Leu Asp  
2310 50 55 60  
2311 Gly Arg Arg Ala Gln Arg Leu Gly Ala Arg Thr Pro Gly His Val Thr  
2312 65 70 75 80  
2313 Val Val His His Asp Phe Leu Gln Tyr Pro Leu Pro Arg Asn Pro His  
2314 85 90 95  
2315 Val Val Val Gly Asn Val Pro Phe His Leu Thr Thr Ala Ile Met Arg  
2316 100 105 110  
2317 Arg Leu Leu Asp Ala Gln His Trp His Thr Ala Val Leu Leu Val Gln  
2318 115 120 125  
2319 Trp Glu Val Ala Arg Arg Arg Ala Gly Val Gly Gly Ser Thr Leu Leu  
2320 130 135 140  
2321 Thr Ala Gly Trp Ala Pro Trp Tyr Glu Phe Asp Leu His Ser Arg Val  
2322 145 150 155 160  
2323 Pro Ala Arg Ala Phe Arg Pro Met Pro Gly Val Asp Gly Gly Val Leu

RAW SEQUENCE LISTING

DATE: 03/19/2002

PATENT APPLICATION: US/09/988,384A

TIME: 13:55:50

Input Set : A:\09-988384 Sequence Listing.txt

Output Set: N:\CRF3\03192002\I988384A.raw

only the  
errors  
portions of  
sequence 6  
shown

→ when numbering  
the last  
amino acid  
on a line,  
please end  
the number  
directly below  
the last letter  
of the amino  
acid

Ala | s | Leu  
p | g | 10080  
e | c |

e.g.  
Trp 10065 | s | Ala  
p | e |

please  
insert  
a space  
between  
ending  
number  
and next  
amino  
acid

```

3549 Glu Val Asp Val Leu Glu Ala Gly Ala Asp Asp Asp Arg Glu Ala Leu
3550      9970      9975      9980
3551 Ala Ala Arg Leu Thr Ala Leu Thr Thr Gly Asp Gly Phe Thr Gly Val
3552 9985      9990      9995      10000
3553 Val Ser Leu Leu Asp Asp Leu Val Pro Gln Val Ala Trp Val Gln Ala
3554      10005      10010      10015
3555 Leu Gly Asp Ala Gly Ile Lys Ala Pro Leu Trp Ser Val Thr Gln Gly
3556      10020      10025      10030
3557 Ala Val Ser Val Gly Arg Leu Asp Thr Pro Ala Asp Pro Asp Arg Ala
3558      10035      10040      10045
3559 Met Leu Trp Gly Leu Gly Arg Val Val Ala Leu Glu His Pro Glu Arg
3560      10050      10055      10060
3561 Trp Ala Gly Leu Val Asp Leu Pro Ala Gln Pro Asp Ala Ala Ala Leu
E--> 3562 10065      10070      10075      10080
3563 Ala His Leu Val Thr Ala Leu Ser Gly Ala Thr Gly Glu Asp Gln Ile
3564      10085      10090      10095
3565 Ala Ile Arg Thr Thr Gly Leu His Ala Arg Arg Leu Ala Arg Ala Pro
3566      10100      10105      10110
3567 Leu His Gly Arg Arg Pro Thr Arg Asp Trp Gln Pro His Gly Thr Val
3568      10115      10120      10125
3569 Leu Ile Thr Gly Gly Thr Gly Ala Leu Gly Ser His Ala Ala Arg Trp
3570      10130      10135      10140
3571 Met Ala His His Gly Ala Glu His Leu Leu Leu Val Ser Arg Ser Gly
E--> 3572 10145      10150      10155      10160
3573 Glu Gln Ala Pro Gly Ala Thr Gln Leu Thr Ala Glu Leu Thr Ala Ser
3574      10165      10170      10175
3575 Gly Ala Arg Val Thr Ile Ala Ala Cys Asp Val Ala Asp Pro His Ala
3576      10180      10185      10190
3577 Met Arg Thr Leu Leu Asp Ala Ile Pro Ala Glu Thr Pro Leu Thr Ala
3578      10195      10200      10205
3579 Val Val His Thr Ala Gly Ala Pro Gly Gly Asp Pro Leu Asp Val Thr
3580      10210      10215      10220
3581 Gly Pro Glu Asp Ile Ala Arg Ile Leu Gly Ala Lys Thr Ser Gly Ala
E--> 3582 10225      10230      10235      10240
3583 Glu Val Leu Asp Asp Leu Leu Arg Gly Thr Pro Leu Asp Ala Phe Val
3584      10245      10250      10255
3585 Leu Tyr Ser Ser Asn Ala Gly Val Trp Gly Ser Gly Ser Gln Gly Val
3586      10260      10265      10270
3587 Tyr Ala Ala Ala Asn Ala His Leu Asp Ala Leu Ala Ala Arg Arg Arg
3588      10275      10280      10285
3589 Ala Arg Gly Glu Thr Ala Thr Ser Val Ala Trp Gly Leu Trp Ala Gly
3590      10290      10295      10300
3591 Asp Gly Met Gly Arg Gly Ala Asp Asp Ala Tyr Trp Gln Arg Arg Gly
E--> 3592 10305      10310      10315      10320
3593 Ile Arg Pro Met Ser Pro Asp Arg Ala Leu Asp Glu Leu Ala Lys Ala
3594      10325      10330      10335
3595 Leu Ser His Asp Glu Thr Phe Val Ala Val Ala Asp Val Asp Trp Glu
3596      10340      10345      10350
3597 Arg Phe Ala Pro Ala Phe Thr Val Ser Arg Pro Ser Leu Leu Leu Asp

```

3

RAW SEQUENCE LISTING

DATE: 03/19/2002

PATENT APPLICATION: US/09/988,384A

TIME: 13:55:50

Input Set : A:\09-988384 Sequence Listing.txt

Output Set: N:\CRF3\03192002\I988384A.raw

3598 10355 10360 10365  
3599 Gly Val Pro Glu Ala Arg Gln Ala Leu Ala Pro Val Gly Ala Pro  
3600 10370 10375 10380  
3601 Ala Pro Gly Asp Ala Ala Val Ala Pro Thr Gly Gln Ser Ser Ala Leu  
E--> 3602 10385 10390 10395 10400  
3603 Ala Ala Ile Thr Ala Leu Pro Glu Pro Glu Arg Arg Pro Ala Leu Leu  
3604 10405 10410 10415  
3605 Thr Leu Val Arg Thr His Ala Ala Val Leu Gly His Ser Ser Pro  
3606 10420 10425 10430  
3607 Asp Arg Val Ala Pro Gly Arg Ala Phe Thr Glu Leu Gly Phe Asp Ser  
3608 10435 10440 10445  
3609 Leu Thr Ala Val Gln Leu Arg Asn Gln Leu Ser Thr Val Val Gly Asn  
3610 10450 10455 10460  
3611 Arg Leu Pro Ala Thr Thr Val Phe Asp His Pro Thr Pro Ala Ala Leu  
E--> 3612 10465 10470 10475 10480  
3613 Ala Ala His Leu His Glu Ala Tyr Leu Ala Pro Ala Glu Pro Ala Pro  
3614 10485 10490 10495  
3615 Thr Asp Trp Glu Gly Arg Val Arg Arg Ala Leu Ala Glu Leu Pro Leu  
3616 10500 10505 10510  
3617 Asp Arg Leu Arg Asp Ala Gly Val Leu Asp Thr Val Leu Arg Leu Thr  
3618 10515 10520 10525  
3619 Gly Ile Glu Pro Glu Pro Gly Ser Gly Gly Ser Asp Gly Gly Ala Ala  
3620 10530 10535 10540  
3621 Asp Pro Gly Ala Glu Pro Glu Ala Ser Ile Asp Asp Leu Asp Ala Glu  
E--> 3622 10545 10550 10555 10560  
3623 Ala Leu Ile Arg Met Ala Leu Gly Pro Arg Asn Thr Met Thr Ser Ser  
3624 10565 10570 10575  
3625 Asn Glu Gln Leu Val Asp Ala Leu Arg Ala Ser Leu Lys Glu Asn Glu  
3626 10580 10585 10590  
3627 Glu Leu Arg Lys Glu Ser Arg Arg Arg Ala Asp Arg Arg Gln Glu Pro  
3628 10595 10600 10605  
3629 Met Ala Ile Val Gly Met Ser Cys Arg Phe Ala Gly Gly Ile Arg Ser  
3630 10610 10615 10620  
3631 Pro Glu Asp Leu Trp Asp Ala Val Ala Ala Gly Lys Asp Leu Val Ser  
E--> 3632 10625 10630 10635 10640  
3633 Glu Val Pro Glu Glu Arg Gly Trp Asp Ile Asp Ser Leu Tyr Asp Pro  
3634 10645 10650 10655  
3635 Val Pro Gly Arg Lys Gly Thr Thr Tyr Val Arg Asn Ala Ala Phe Leu  
3636 10660 10665 10670  
3637 Asp Asp Ala Ala Gly Phe Asp Ala Ala Phe Phe Gly Ile Ser Pro Arg  
3638 10675 10680 10685  
3639 Glu Ala Leu Ala Met Asp Pro Gln Gln Arg Gln Leu Leu Glu Ala Ser  
3640 10690 10695 10700  
3641 Trp Glu Val Phe Glu Arg Ala Gly Ile Asp Pro Ala Ser Val Arg Gly  
E--> 3642 10705 10710 10715 10720  
3643 Thr Asp Val Gly Val Tyr Val Gly Cys Gly Tyr Gln Asp Tyr Ala Pro  
3644 10725 10730 10735  
3645 Asp Ile Arg Val Ala Pro Glu Gly Thr Gly Gly Tyr Val Val Thr Gly  
3646 10740 10745 10750

same  
error

RAW SEQUENCE LISTING

DATE: 03/19/2002

PATENT APPLICATION: US/09/988,384A

TIME: 13:55:50

Input Set : A:\09-988384 Sequence Listing.txt

Output Set: N:\CRF3\03192002\I988384A.raw

```

3647 Asn Ser Ser Ala Val Ala Ser Gly Arg Ile Ala Tyr Ser Leu Gly Leu
3648      10755      10760      10765
3649 Glu Gly Pro Ala Val Thr Val Asp Thr Ala Cys Ser Ser Leu Val
3650      10770      10775      10780
3651 Ala Leu His Leu Ala Leu Lys Gly Leu Arg Asn Gly Asp Cys Ser Thr
E--> 3652 (10785)      10790      10795      (10800)
3653 Ala Leu Val Gly Gly Val Ala Val Leu Ala Thr Pro Gly Ala Phe Ile
3654      10805      10810      10815
3655 Glu Phe Ser Ser Gln Gln Ala Met Ala Ala Asp Gly Arg Thr Lys Gly
3656      10820      10825      10830
3657 Phe Ala Ser Ala Ala Asp Gly Leu Ala Trp Gly Glu Gly Val Ala Val
3658      10835      10840      10845
3659 Leu Leu Leu Glu Arg Leu Ser Asp Ala Arg Arg Lys Gly His Arg Val
3660      10850      10855      10860
3661 Leu Ala Val Val Arg Gly Ser Ala Ile Asn Gln Asp Gly Ala Ser Asn
E--> 3662 (10865)      10870      10875      (10880)
3663 Gly Leu Thr Ala Pro His Gly Pro Ser Gln Gln His Leu Ile Arg Gln
3664      10885      10890      10895
3665 Ala Leu Ala Asp Ala Arg Leu Thr Ser Ser Asp Val Asp Val Val Glu
3666      10900      10905      10910
3667 Gly His Gly Thr Gly Thr Arg Leu Gly Asp Pro Ile Glu Ala Gln Ala
3668      10915      10920      10925
3669 Leu Leu Ala Thr Tyr Gly Gln Gly Arg Ala Pro Gly Gln Pro Leu Arg
3670      10930      10935      10940
3671 Leu Gly Thr Leu Lys Ser Asn Ile Gly His Thr Gln Ala Ala Ser Gly
E--> 3672 (10945)      10950      10955      (10960)
3673 Val Ala Gly Val Ile Lys Met Val Gln Ala Leu Arg His Gly Val Leu
3674      10965      10970      10975
3675 Pro Lys Thr Leu His Val Asp Glu Pro Thr Asp Gln Val Asp Trp Ser
3676      10980      10985      10990
3677 Ala Gly Ser Val Glu Leu Leu Thr Glu Ala Val Asp Trp Pro Glu Arg
3678      10995      11000      11005
3679 Pro Gly Arg Leu Arg Arg Ala Gly Val Ser Ala Phe Gly Val Gly Gly
3680      11010      11015      11020
3681 Thr Asn Ala His Val Val Leu Glu Glu Ala Pro Ala Val Glu Glu Ser
E--> 3682 (11025)      11030      11035      (11040)
3683 Pro Ala Val Glu Pro Pro Ala Gly Gly Gly Val Val Pro Trp Pro Val
3684      11045      11050      11055
3685 Ser Ala Lys Thr Ser Ala Ala Leu Asp Ala Gln Ile Gly Gln Leu Ala
3686      11060      11065      11070
3687 Ala Tyr Ala Glu Asp Arg Thr Asp Val Asp Pro Ala Val Ala Ala Arg
3688      11075      11080      11085
3689 Ala Leu Val Asp Ser Arg Thr Ala Met Glu His Arg Ala Val Ala Val
3690      11090      11095      11100
3691 Gly Asp Ser Arg Glu Ala Leu Arg Asp Ala Leu Arg Met Pro Glu Gly
E--> 3692 (11105)      11110      11115      (11120)
3693 Leu Val Arg Gly Thr Val Thr Asp Pro Gly Arg Val Ala Phe Val Phe
3694      11125      11130      11135
3695 Pro Gly Gln Gly Thr Gln Trp Ala Gly Met Gly Ala Glu Leu Leu Asp

```

*same*  
*error*

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RAW SEQUENCE LISTING

DATE: 03/19/2002

PATENT APPLICATION: US/09/988,384A

TIME: 13:55:50

Input Set : A:\09-988384 Sequence Listing.txt

Output Set: N:\CRF3\03192002\I988384A.raw

3696 11140 11145 11150  
3697 Ser Ser Pro Glu Phe Ala Ala Ala Met Ala Glu Cys Glu Thr Ala Leu  
3698 11155 11160 11165  
3699 Ser Pro Tyr Val Asp Trp Ser Leu Glu Ala Val Val Arg Gln Ala Pro  
3700 11170 11175 11180  
3701 Ser Ala Pro Thr Leu Asp Arg Val Asp Val Val Gln Pro Val Thr Phe  
E--> 3702 11185 11190 11195 11200  
3703 Ala Val Met Val Ser Leu Ala Lys Val Trp Gln His His Gly Ile Thr  
3704 11205 11210 11215  
3705 Pro Glu Ala Val Ile Gly His Ser Gln Gly Glu Ile Ala Ala Ala Tyr  
3706 11220 11225 11230  
3707 Val Ala Gly Ala Leu Thr Leu Asp Asp Ala Ala Arg Val Val Thr Leu  
3708 11235 11240 11245  
3709 Arg Ser Lys Ser Ile Ala Ala His Leu Ala Gly Lys Gly Gly Met Ile  
3710 11250 11255 11260  
3711 Ser Leu Ala Leu Ser Glu Glu Ala Thr Arg Gln Arg Ile Glu Asn Leu  
E--> 3712 11265 11270 11275 11280  
3713 His Gly Leu Ser Ile Ala Ala Val Asn Gly Pro Thr Ala Thr Val Val  
3714 11285 11290 11295  
3715 Ser Gly Asp Pro Thr Gln Ile Gln Glu Leu Ala Gln Ala Cys Glu Ala  
3716 11300 11305 11310  
3717 Asp Gly Ile Arg Ala Arg Ile Ile Pro Val Asp Tyr Ala Ser His Ser  
3718 11315 11320 11325  
3719 Ala His Val Glu Thr Ile Glu Asn Glu Leu Ala Asp Val Leu Ala Gly  
3720 11330 11335 11340  
3721 Leu Ser Pro Gln Thr Pro Gln Val Pro Phe Phe Ser Thr Leu Glu Gly  
E--> 3722 11345 11350 11355 11360  
3723 Thr Trp Ile Thr Glu Pro Ala Leu Asp Gly Gly Tyr Trp Tyr Arg Asn  
3724 11365 11370 11375  
3725 Leu Arg His Arg Val Gly Phe Ala Pro Ala Val Glu Thr Leu Ala Thr  
3726 11380 11385 11390  
3727 Asp Glu Gly Phe Thr His Phe Ile Glu Val Ser Ala His Pro Val Leu  
3728 11395 11400 11405  
3729 Thr Met Thr Leu Pro Asp Lys Val Thr Gly Leu Ala Thr Leu Arg Arg  
3730 11410 11415 11420  
3731 Glu Asp Gly Gly Gln His Arg Leu Thr Thr Ser Leu Ala Glu Ala Trp  
E--> 3732 11425 11430 11435 11440  
3733 Ala Asn Gly Leu Ala Leu Asp Trp Ala Ser Leu Leu Pro Ala Thr Gly  
3734 11445 11450 11455  
3735 Ala Leu Ser Pro Ala Val Pro Asp Leu Pro Thr Tyr Ala Phe Gln His  
3736 11460 11465 11470  
3737 Arg Ser Tyr Trp Ile Ser Pro Ala Gly Pro Gly Glu Ala Pro Ala His  
3738 11475 11480 11485  
3739 Thr Ala Ser Gly Arg Glu Ala Val Ala Glu Thr Gly Leu Ala Trp Gly  
3740 11490 11495 11500  
3741 Pro Gly Ala Glu Asp Leu Asp Glu Glu Gly Arg Arg Ser Ala Val Leu  
E--> 3742 11505 11510 11515 11520  
3743 Ala Met Val Met Arg Gln Ala Ala Ser Val Leu Arg Cys Asp Ser Pro  
3744 11525 11530 11535

*same*

## RAW SEQUENCE LISTING

DATE: 03/19/2002

PATENT APPLICATION: US/09/988,384A

TIME: 13:55:50

Input Set : A:\09-988384 Sequence Listing.txt

Output Set: N:\CRF3\03192002\I988384A.raw

3745 Glu Glu Val Pro Val Asp Arg Pro Leu Arg Glu Ile Gly Phe Asp Ser  
 3746 11540 11545 11550  
 3747 Leu Thr Ala Val Asp Phe Arg Asn Arg Val Asn Arg Leu Thr Gly Leu  
 3748 11555 11560 11565  
 3749 Gln Leu Pro Pro Thr Val Val Phe Gln His Pro Thr Pro Val Ala Leu  
 3750 11570 11575 11580  
 3751 Ala Glu Arg Ile Ser Asp Glu Leu Ala Glu Arg Asn Trp Ala Val Ala  
 E--> 3752 11585 11590 11595 11600  
 3753 Glu Pro Ser Asp His Glu Gln Ala Glu Glu Glu Lys Ala Ala Ala Pro  
 3754 11605 11610 11615  
 3755 Ala Gly Ala Arg Ser Gly Ala Asp Thr Gly Ala Gly Ala Gly Met Phe  
 3756 11620 11625 11630  
 3757 Arg Ala Leu Phe Arg Gln Ala Val Glu Asp Asp Arg Tyr Gly Glu Phe  
 3758 11635 11640 11645  
 3759 Leu Asp Val Leu Ala Glu Ala Ser Ala Phe Arg Pro Gln Phe Ala Ser  
 3760 11650 11655 11660  
 3761 Pro Glu Ala Cys Ser Glu Arg Leu Asp Pro Val Leu Leu Ala Gly Gly  
 E--> 3762 11665 11670 11675 11680  
 3763 Pro Thr Asp Arg Ala Glu Gly Arg Ala Val Leu Val Gly Cys Thr Gly  
 3764 11685 11690 11695  
 3765 Thr Ala Ala Asn Gly Gly Pro His Glu Phe Leu Arg Leu Ser Thr Ser  
 3766 11700 11705 11710  
 3767 Phe Gln Glu Glu Arg Asp Phe Leu Ala Val Pro Leu Pro Gly Tyr Gly  
 3768 11715 11720 11725  
 3769 Thr Gly Thr Gly Thr Gly Thr Ala Leu Leu Pro Ala Asp Leu Asp Thr  
 3770 11730 11735 11740  
 3771 Ala Leu Asp Ala Gln Ala Arg Ala Ile Leu Arg Ala Ala Gly Asp Ala  
 E--> 3772 11745 11750 11755 11760  
 3773 Pro Val Val Leu Leu Gly His Ser Gly Gly Ala Leu Leu Ala His Glu  
 3774 11765 11770 11775  
 3775 Leu Ala Phe Arg Leu Glu Arg Ala His Gly Ala Pro Pro Ala Gly Ile  
 3776 11780 11785 11790  
 3777 Val Leu Val Asp Pro Tyr Pro Pro Gly His Gln Glu Pro Ile Glu Val  
 3778 11795 11800 11805  
 3779 Trp Ser Arg Gln Leu Gly Glu Gly Leu Phe Ala Gly Glu Leu Glu Pro  
 3780 11810 11815 11820  
 3781 Met Ser Asp Ala Arg Leu Leu Ala Met Gly Arg Tyr Ala Arg Phe Leu  
 E--> 3782 11825 11830 11835 11840  
 3783 Ala Gly Pro Arg Pro Gly Arg Ser Ser Ala Pro Val Leu Leu Val Arg  
 3784 11845 11850 11855  
 3785 Ala Ser Glu Pro Leu Gly Asp Trp Gln Glu Glu Arg Gly Asp Trp Arg  
 3786 11860 11865 11870  
 3787 Ala His Trp Asp Leu Pro His Thr Val Ala Asp Val Pro Gly Asp His  
 3788 11875 11880 11885  
 3789 Phe Thr Met Met Arg Asp His Ala Pro Ala Val Ala Glu Ala Val Leu  
 3790 11890 11895 11900  
 3791 Ser Trp Leu Asp Ala Ile Glu Gly Ile Glu Gly Ala Gly Lys Met Thr  
 E--> 3792 11905 11910 11915 11920  
 3793 Asp Arg Pro Leu Asn Val Asp Ser Gly Leu Trp Ile Arg Arg Phe His

*same*

7

RAW SEQUENCE LISTING

DATE: 03/19/2002

PATENT APPLICATION: US/09/988,384A

TIME: 13:55:50

Input Set : A:\09-988384 Sequence Listing.txt

Output Set: N:\CRF3\03192002\I988384A.raw

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3794          11925          11930          11935
3795 Pro Ala Pro Asn Ser Ala Val Arg Leu Val Cys Leu Pro His Ala Gly
3796          11940          11945          11950
3797 Gly Ser Ala Ser Tyr Phe Phe Arg Phe Ser Glu Glu Leu His Pro Ser
3798          11955          11960          11965
3799 Val Glu Ala Leu Ser Val Gln Tyr Pro Gly Arg Gln Asp Arg Arg Ala
3800          11970          11975          11980
3801 Glu Pro Cys Leu Glu Ser Val Glu Glu Leu Ala Glu His Val Val Ala
E--> 3802 11985          11990          11995          12000
3803 Ala Thr Glu Pro Trp Trp Gln Glu Gly Arg Leu Ala Phe Phe Gly His
3804          12005          12010          12015
3805 Ser Leu Gly Ala Ser Val Ala Phe Glu Thr Ala Arg Ile Leu Glu Gln
3806          12020          12025          12030
3807 Arg His Gly Val Arg Pro Glu Gly Leu Tyr Val Ser Gly Arg Arg Ala
3808          12035          12040          12045
3809 Pro Ser Leu Ala Pro Asp Arg Leu Val His Gln Leu Asp Asp Arg Ala
3810          12050          12055          12060
3811 Phe Leu Ala Glu Ile Arg Arg Leu Ser Gly Thr Asp Glu Arg Phe Leu
E--> 3812 12065          12070          12075          12080
3813 Gln Asp Asp Glu Leu Arg Leu Val Leu Pro Ala Leu Arg Ser Asp
3814          12085          12090          12095
3815 Tyr Lys Ala Ala Glu Thr Tyr Leu His Arg Pro Ser Ala Lys Leu Thr
3816          12100          12105          12110
3817 Cys Pro Val Met Ala Leu Ala Gly Asp Arg Asp Pro Lys Ala Pro Leu
3818          12115          12120          12125
3819 Asn Glu Val Ala Glu Trp Arg Arg His Thr Ser Gly Pro Phe Cys Leu
3820          12130          12135          12140
3821 Arg Ala Tyr Ser Gly Gly His Phe Tyr Leu Asn Asp Gln Trp His Glu
E--> 3822 12145          12150          12155          12160
3823 Ile Cys Asn Asp Ile Ser Asp His Leu Leu Val Thr Arg Gly Ala Pro
3824          12165          12170          12175
3825 Asp Ala Arg Val Val Gln Pro Pro Thr Ser Leu Ile Glu Gly Ala Ala
3826          12180          12185          12190
3827 Lys Arg Trp Gln Asn Pro Arg
3828          12195

```

*same*



**VERIFICATION SUMMARY**

PATENT APPLICATION: US/09/988,384A

DATE: 03/19/2002

TIME: 13:55:52

Input Set : A:\09-988384 Sequence Listing.txt

Output Set: N:\CRF3\03192002\I988384A.raw

L:3562 M:332 E: (32) Invalid/Missing Amino Acid Numbering, SEQ ID:6

M:332 Repeated in SeqNo=6